U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES National Institute for Occupational Safety and Health

SUPPLEMENTAL INSTRUCTIONS FOR PREPARING TRAINING AND CONTINUING EDUCATION COMPONENTS FOR AN EDUCATION AND RESEARCH CENTER (ERC) GRANT APPLICATION

I. Introduction

This document provides instructions to be used when applying for a competing (new, competing continuation, and supplemental) NIOSH Education and Research Center Grant. Begin by reading the General Instructions in Section I-B of the PHS 398, and then follow both sets of instructions using these special instructions for preparing an Education and Research Center (ERC) application.

Note especially the eligibility requirements, submission dates, award provisions, and review criteria in the current Program Announcements.

II. Specific Instructions

1. FACE PAGE

Item 2. Response to Specific Request for Applications (RFA) or Program Announcement (PA)

Indicate "NIOSH Education and Research Center"

Item 4. Human Subjects Research

Check "Yes" if training plans include involvement of trainees in projects that include human subjects. If the applicant organization has an approved Federal Wide Assurance (FWA) or other Assurance on file with the Office for Human Research Protections (OHRP), insert the FWA or other number in Item 4b. If an award is made, human subjects may not be involved and trainees may not participate in human subjects related research until a certification of the date of IRB approval or a designation of exemption has been submitted to and accepted by the PHS agency, and NIOSH requirements for human subjects research have been addressed (see instructions in Section I, Human Subjects Research, and the NIH Grants Policy Statement (GPS).

In many instances, trainees supported by institutional training grants will be participating in research supported by research project grants for which the IRB review of human subjects is already complete or an exemption is already designated. This review or exemption designation is sufficient, provided the IRB determines that the research would not be substantially modified by the participation of a trainee. The appropriate grants must be identified along with their IRB approval dates or exemption designation in a table (table 14) that is included in Section G of the Training Plan, "Human Subjects".

These policies apply to all Performance Sites.

Item 5. Vertebrate Animals

Check "Yes" if training plans include trainee participation in projects involving vertebrate animals. If the applicant organization has an approved Animal Welfare

Assurance on file with the Office of Laboratory Animal Welfare (OLAW), insert the assurance number in Item 5b. If at the time of application, plans for the involvement of vertebrate animals are so indefinite that Institutional Animal Care and Use Committee (IACUC) review and approval are not feasible, insert "Indefinite" at Item 5a. In many instances, trainees supported by institutional training grants will be participating in research supported by research project grants for which the IACUC review is already complete. This review is sufficient, provided that the research would not be substantially modified by the participation of a trainee. The appropriate grants must be identified (in Table 15) along with their IACUC approval dates in Section H of the Training Plan. The institution must ensure that trainees are enrolled in the institution's animal welfare training and occupational health and safety programs for personnel who have contact with animals, as appropriate. It is also the institution's responsibility to ensure that trainees are properly supervised when working with live vertebrate animals. If an award is made, vertebrate animals may not be used and trainees may not participate in vertebrate animal related research until a verification of the date of IACUC approval has been submitted to the PHS awarding component.

These policies apply to all Performance Sites.

Item 6. Dates of Entire Proposed Period of Support

The usual starting date for an ERC is July 1. The NIOSH restricts submission and review dates to once a year. Applicants are strongly encouraged to contact the NIOSH staff identified in the PA before submitting an application.

2. DESCRIPTION, PERFORMANCE SITES, KEY PERSONNEL, OTHER SIGNIFICANT CONTRIBUTORS, AND HUMAN EMBRYONIC STEM CELLS (PHS 398 FORM PAGE 2)

Description: Project Summary and Relevance

The first and major component of the Description is a Project Summary. Summarize the objectives, rationale and design of the ERC program. Since ERCs are multi-component, interdisciplinary projects, it is important that the applicant succinctly describe the entire ERC in the Description. Provide information regarding the areas and scientific disciplines encompassed by the program. Include a brief description of the level(s) and duration of the proposed training, and the projected number of participating trainees in each proposed training area including continuing education.

The second component of the Description is Relevance. Using no more than three or four sentences, describe the relevance of this training to occupational safety and health. In this section, be succinct and use plain language that can be understood by a general, lay audience.

Performance Sites. List all of the locations where training, program management, and the research experiences described in the Program Plan will be performed. If a performance site is participating in research using human subjects, it is the responsibility of the applicant organization to assure that the performance site complies with the human subject protection regulations in 45 CFR Part 46 and other NIOSH human subject related policies described in the PHS 398 and GPS. For research involving vertebrate animals,

the applicant organization must ensure that all performance sites hold OLAW-approved assurances.

Key Personnel and Other Significant Contributors

The Principal Investigator (ERC Director), Program Directors, training faculty and any other individuals whose contributions are critical to the development, management and execution of the ERC Program in a substantive, measurable way (whether or not salaries are reimbursed) should be identified as Key Personnel. Organize this section in the same manner as the rest of the application. That is, for each ERC program area, identify the program director (if appropriate), the key faculty etc.

Human Embryonic Stem Cells. For each trainee utilizing human embryonic stem cells in a research project, list project title, mentor, and specific cell line(s) from the registry.

3. TABLE OF CONTENTS FOR AN EDUCATION AND RESEARCH CENTER APPLICATION

In order to facilitate the preparation and review of the ERC application, the following SUBSTITUE Table of Contents should be used. It is a minor modification of the PHS 398 Table of Contents.

- o PHS 398 Face Page
- o PHS 398 Form Page 2: ERC Description, Performance Sites, and Personnel (use additional continuation pages as needed for the key personnel)
- o Table of Contents
- o Detailed Budget for the Initial Budget Period Direct Costs for the entire ERC (Form page 4)
- o Detailed Budget for each ERC Area for the Initial Budget Period organized by program area (center wide activities, postdoctoral training (if independent from one of the training areas), IH, OMR, OHN, OS, allied OSH, continuing education (CE and HST), NORA project(s)). Use those that apply, and label each budget page in top left margin with the name of the program area. An applicant must use budget form page 4 for each program area except for the training programs (exluding CE or HST). The training programs use substitute budget form page 4 (Substitute Detailed Budget for Initial Budget Period Direct Costs).

Label each form page 4 using the top left margin with the name of the program area.

- o Budget for the Entire Proposed Period of Support for the entire ERC (Form page 5)
- o Budget for the Entire Proposed Period for each ERC area (Form page 5). Form page 5 is completed for each program area proposed. For the training programs use the substitute budget form page 5 (Substitute Budget for Entire Proposed Period of Support Direct Costs).

Label each form page 5 using the top left margin with the name of the program area.

- o Biographical Sketch-Principal Investigator/Program Director
- o Other Biographical Sketches
- o Other Support
- o Overall Description of the ERC (2 page maximum)

- o Past Performance/Accomplishments in Last Project Period (existing (competing renewal) ERCs- 5 page maximum excluding tables on graduates)
- o Past Performance/Accomplishments Relevant to ERC goals (new applicants only 5 page maximum excluding tables on graduates)
- o Resources Statement on the Institutional/Other Commitments to the ERC (1 page maximum, see page 57-58 of 398 instructions, also include Table 1- ERC Training Support)
- o Human Subjects summary table that lists all the projects and human subjects information (title, performance sites, FWAs, IRB approval date/status, if applicable)
- o Cover Sheet: labeled Center Wide Activities Section (covers sheets are on plain white paper). The Center Wide Activities Section includes all items up to the training plans section.
- o Cover Sheet labeled Administrative Core; include name of individual responsible for Admin Core (usually the principal investigator)
- o Administrative and Planning Core Plan (should not exceed two pages)
- o Cover Sheet: labeled Outreach Plan; include name of responsible individual
- o Outreach plan (should not exceed three (3) pages)
- o Cover Sheet: labeled Diversity Recruitment Plan; include name of responsible individual
- o Diversity Recruitment Plan (should not exceed three (3) pages)
- o Cover Sheet: labeled Interdisciplinary Coordination Plan; include name of responsible individual
- o Interdisciplinary Coordination Plan. This plan should not exceed three (3) pages.
- o Cover Sheet: labeled Pilot/Small Projects Program; include name of responsible individual
- o Pilot/Small Projects Program Plan (should not exceed three pages)
- o Cover Sheet labeled Training Programs Section
- o Cover Sheet labeled Training support tables
- o Cover Sheet: Academic Training Area A (replace A with name of academic training area such as IH, OHN, OMR, etc); include name of program director responsible for this area.
- o PHS 398 form page 2 for Training Area A . Follow guidance provided above for the overall ERC description except it should focus on the academic training area.
- o Program Plan: Training Area A (follow Program Plan outline in this document).It should not exceed 15 pages excluding tables.
- o Cover Sheet: Academic Training Area B (replace B with the name of the academic training area such as IH, OHN, OS, etc); include name of program director responsible for this area.
- o PHS for 398 page 2: Follow guidance for the overall ERC description except it should focus on the academic training area.
- o Program Plan: Academic Training Area B (follow Program Plan outline in this document). It should not exceed 15 pages excluding tables.
- o Continue with as many sections as there are academic training areas.
- o Cover Sheet: Post Doctoral Training; include name of project investigator responsible for this component. This section may not be needed if the postdoctoral training is incorporated into the training areas proposed.

- o PHS for 398 page 2: Post Doctoral Training Component. Follow guidance for the overall ERC description except it should focus on the post doctoral training area. Do not copy the ERC description for this section. Use this section only if the postdoctoral training is independent of the other training areas.
- o Post Doctoral Training Plan (follow Program Plan outline in the 398 instructions). It should not exceed 15 pages excluding tables.
- o Cover Sheet: Continuing Education in Occupational Safety and Health
- o PHS for 398 page 2: Continuing Education Component. Follow guidance provided above for the overall ERC description except it should focus on continuing education.
- o Program Plan: Continuing Education for Occupational Safety and Health (follow Program Plan outline in this document). It should not exceed 15 pages excluding tables.
- o Cover Sheet: Continuing Education for Hazardous Substance Training (if applicable)
- o PHS for 398 page 2: Continuing Education for Hazardous Substance Component. Follow guidance for the overall ERC description except it should focus on hazardous substance training.
- o Program Plan: Continuing Education for Hazardous Substance Training (follow Program Plan outline in this document). It should not exceed 15 pages excluding tables.
- o Cover Sheet: NORA project A
- o PHS for 398 page 2: NORA project A. Follow guidance for the overall ERC description except it should focus on the NORA project.
- o NORA Program Plan A: NORA Project Plan (follow research Program Plan outline in the 398 instructions or the program plan outline in these instructions). However, it should not exceed 15 pages.
- o Add additional sections as needed for each NORA project.
- o Human Subjects
- o Vertebrate Animals
- o Literature Cited
- o Consortium/Contractual Arrangements
- o Consultants and Collaborators, including NIOSH/CDC

Note: In the top left margin of the detailed (form page 4) and summary (form page 5) budget pages, the principal investigator should identify the project title. For example, Academic program: Industrial Hygiene. Type density and size throughout the entire application must conform to the limits provided on page 14 in the PHS 398 instructions.

4. DETAILED BUDGET FOR INITIAL BUDGET PERIOD

If an ERC applicant is requesting a budget of \$500,000 directs costs or more for any year, you do not need to obtain prior approval before submitting the application.

An ERC is a multi-component project and several detailed budget pages are needed to describe the first year budget. The first detailed budget page labeled "overall ERC budget" in the top left margin summarizes the first year budget for the entire ERC. This budget page is followed by detailed budget pages for each component area. For academic training program areas (IH, OMR, OHN, etc.) use the institutional Kirschstein-NRSA substitute Form Page 4. For other areas, such as Center-wide activities, continuing

education and NORA, use Form page 4 of the PHS 398. Each detailed budget page is labeled in the top left margin with the name of the component area (center wide activities, IH training program, Continuing Education etc.) It is important that the budget pages are ordered in the same manner as the projects, and are clearly labeled in the top left margin with the name of the component area.

For each academic training area, the following guidance is provided for completing substitute form page 4.

Stipends

Enter the number of trainees and total stipend amount for each trainee category as appropriate. Use the current Institutional Kirschstein-NRSA stipend schedule, (http://grants.nih.gov/training/nrsa.htm). If a category contains different stipend levels, e.g., for varying levels of postdoctoral experience and/or varying appointment periods, itemize. Enter the total stipends for all categories.

Tuition, Fees, and Health Insurance

Explain in detail the composition of this item. Itemize tuition, individual fees, and health insurance. If tuition varies, (e.g., in-state, out-of-state, student status) identify these separately. Tuition at the postdoctoral level is limited to that required for specified courses. Tuition and fees (including self-only or family health insurance) may be requested only to the extent that the same resident or nonresident tuition and health insurance fees are charged to regular non-Federally supported students and post-doctorate fellows. Grantees should request full needs. A formula will be applied by NIOSH at the time an award is calculated.

Trainee Travel

State the purpose of any travel, type of meeting (such as sponsoring organization), the number of trips involved, and the number of individuals for whom funds are requested, bearing in mind that PHS policy requires coach class air travel be used. Justify foreign travel in detail, describing its importance to the training experience.

Training Related Expenses

Funds to defray other costs of training, such as faculty and staff salaries, consultant costs, equipment, research supplies, staff travel, etc., are requested as a lump sum based on the amounts specified in the Program Announcement for each trainee in the program. Give the number of trainees at the predetermined rate and enter the total dollar figure. No further itemization or explanation is required.

5. BUDGET FOR ENTIRE PROPOSED PERIOD OF SUPPORT INSTITUTIONAL KIRSCHSTEIN-NRSA FORM PAGE 5

Use the Form Page 5 and Institutional Kirschstein-NRSA Substitute Form Page 5. Follow the guidance provided for item 4 above.

6. BIOGRAPHICAL SKETCH BIOGRAPHICAL SKETCH FORMAT PAGE

There is no Form Page for biographical sketches. Follow the format on the Biographical Sketch Format Page. Include biographical sketches, not to exceed four pages each, for all professional personnel contributing to the training program. Assemble sketches with the program director first and others following in alphabetical order.

7. RESOURCES

RESOURCES FORMAT PAGE

Follow the format and instructions on the Resources Format Page. Describe the facilities and resources that will be used in the proposed training program. Indicate in what ways the applicant organization will support the program (e.g., supplementation of stipends).

8. TRAINING PROGRAM PLANS

Since ERCs must propose training in more than one discipline, this outline should be followed for each training area that is proposed.

Introduction (Revised/Supplemental Applications Only)

If you are preparing a revised or supplemental application, complete the Introduction section first (see instructions provided earlier in Section I of the 398 instructions, Revised Applications or Competing Supplements).

Follow the outline below for all applications to describe the Training Area Plan. Do not exceed 15 pages of narrative for sections A-B. The information provided in tables (see below) will not be counted toward the page limitation; however, these tables should be numbered consecutively and each given a title. Number the table pages at the bottom of the page according to their placement within the narrative or contiguously at the end of the narrative to maintain the continuity of the application.

Before completing the training plan, applicants (principal investigator) may wish to contact the appropriate NIOSH staff, who may have further advice or suggestions for organizing the relevant data into particular formats.

A. Background

Give the rationale for the proposed training program, relevant background history, and the need for the training proposed. Indicate how the proposed program relates to current training activities at the applicant institution.

Describe the purpose and objectives of the training program and summarize the training activities in the proposed program. Describe how the program will benefit from the training support available to the ERC listed in Table 1

B. Program Plan: Academic Training Areas such as IH, OS, OHN, OMR, or Allied OSH

1. **Program Administration**. Describe the program director's qualifications for providing leadership of the program, including relevant scientific background, current

research areas, and experience in training programs. Indicate the program director's percent effort in the proposed program.

Describe the administrative structure of the program and the distribution of responsibilities within it, including the means by which the program director will obtain continuing advice with respect to the operation of the program.

2. **Program Faculty.** For each faculty member, list his/her primary departmental affiliation, and role in the proposed program. Describe each faculty member's expertise that is relevant to this program and indicate how trainees will be mentored by faculty, for example, participation in research, practicum, etc. Describe the extent to which participating faculty members cooperated, interacted, and collaborated in the past, including joint publications, joint sponsorship of student research, or collaborative projects.

In a table (Table 2), for each participating faculty member, list active and pending research grant and contract support from all sources (including Federal, non-Federal, and institutional research grant and contract support) that will provide the context for research training experiences. If none, state "None." Include the source of support, grant number and title, dates of the entire project period, and annual direct costs. If part of a larger project, identify the principal investigator and provide the above data for both the parent grant and the subproject.

In a table (Table 3), for each participating faculty member, list all past and current research trainees for whom the faculty member was/is the thesis advisor or sponsor (past 5 years only). For each student indicate: 1) whether predoctoral or postdoctoral; 2) the training period; 3) previous institution, degree, and year awarded prior to entry into training; 4) title of the research project; and 5) for past students, their current positions, and for current students, their source of support.

In a table (Table 4a) provide statistical data for the past training year on all trainees (including type of degree and trainee number by academic status) and another table (Table 4b) with aggregate data for the past five years. See sample Table 4 for a suggested format.

In a table (Table 5) provide a listing of all trainees for the past five years (name, degree date, type of degree, and current employment). Please be sure to indicate whether or not the graduate was employed in the Occupational Safety and Health field or enrolled in advanced OS&H academic training upon completion of the training program. See sample Table 5 for a suggested format.

For new applications, list representative recent publications of some of the above students or post-doctorates.

In competing continuation applications, denote trainees who were or are supported by this training grant with an asterisk. Individuals who were trained at sites other than the applicant organization may be included but should be specifically

identified. Publications of trainees should be listed in the Progress Report of this application (see instructions for Progress Report below).

3. Proposed Training. Describe the proposed training program. State the training level and number of proposed trainees. For postdoctoral trainees, indicate the proposed distribution by degree (e.g., M.D., Ph.D.). Describe course work/curriculum of study and project opportunities, the duration of training, i.e., usual period of time required to complete the training offered, and if applicable, the extent to which trainees will participate directly in research.

Indicate how the individual disciplinary and/or departmental components of the program are integrated and coordinated and how they will relate to an individual trainee's experience. Describe interdisciplinary experience between students in core and allied program areas including course work, field projects, seminars and other activities.

Provide representative examples of programs for individual trainees. Include curricula, degree requirements, didactic courses, laboratory/internship/practicum experiences, qualifying/comprehensive examinations, and other training activities, such as seminars, journal clubs, etc. For doctoral training, describe how the preceptor and research problems are chosen, how each trainee's program will be guided, and how the trainee's performance will be monitored and evaluated. It is not necessary to provide syllabi for all the courses in the appendix. Include only the relevant core disciplinary courses.

- **4. Training Program Evaluation**. Program directors are encouraged to develop methods for ongoing evaluation of the effectiveness and quality of the training program. Describe any plans for such an evaluation, e.g., plans to obtain feedback from current and former trainees to help identify weaknesses in the training program and to provide suggestions for program improvements.
- **5. Trainee Candidates.** Describe recruitment plans, including the sources and availability of trainees; the qualifications of prospective trainees; and the criteria and procedures by which trainees will be selected.

In a table (Table 6) display the following information for the past five years: 1) number of individuals who have formally applied for training; 2) number offered admission; 3) number who entered training; 4) number who completed or are currently in training; and 5) number who left the program.

Indicate whether these individuals were applying for graduate level or postdoctoral training; for postdoctoral fellows, identify their degrees (e.g., M.D., Ph.D.).

Prospective trainees. In a table (Table 7), anonymously indicate the credentials and application outcomes of the applicant pool for the most recent year for the program. For each applicant (identified with a number in sequence, rather than by name, to safeguard privacy) indicate the previous institution attended, Graduate Record

Examination scores (if applicable), and grade point average. Indicate whether applicants were or were not offered admission, which applicants matriculated, and whether applicants were U.S. citizens or had permanent resident status.

Prospective postdoctoral trainees. In a table (Table 8), present the qualifications of prospective postdoctoral trainees in the most recent applicant pool. Provide the degree(s) and year awarded, previous institution, thesis research topic, preceptor, citizenship or permanent resident status, and residency training (when appropriate) for each prospective applicant to the program. Indicate whether applicants were or were not offered admission and which applicants entered the program.

C. Program Plan: Continuing Education (OSH CE and HST CE)

1. **Program Administration**. Describe the program director's qualifications for providing leadership of the program, including relevant scientific background and expertise, and experience in training or continuing education programs. Indicate the program director's percent effort in the proposed program.

Describe the administrative structure of the program and the distribution of responsibilities within it, including the means by which the program director will obtain continuing advice with respect to the operation of the program.

2. Program Faculty. In Table 11, for each academic faculty member, list his/her primary departmental affiliation, and role in the proposed program.

In a table (Table 12a), provide a display of the continuing education courses for the past year by program area. In table 12b, provide the same display for the past five years. A suggested format is provided at the end of this document.

3. Proposed Training. Describe the need for and goals and objective of OSH/HST Continuing Education (CE) training. Describe the proposed continuing education training program. State the categories of participants and expected number for the CE program. Describe relationships with or influences of competing groups offering similar/complimentary continuing education course. Discuss usefulness of courses in meeting participant's needs. Information on the curriculum design and how it addresses contemporary needs/issues should be included. Information about the training approach and why it was chosen should be provided.

Indicate how the individual disciplinary and/or departmental components of the program are integrated and coordinated and how they will relate to the CE training program. Describe interdisciplinary experiences offered participants. Describe how the CE program assists in preparing practitioners for professional certifications.

Provide representative examples of CE programs (no more than 2 from each area).

4. Training Program Evaluation. Program directors are encouraged to provide for ongoing evaluation of the effectiveness and quality of the CE program. Describe any

plans for such an evaluation, e.g., plans to obtain feedback from current and former participants to help identify weaknesses in the training program and to provide suggestions for program improvements. Provide information on the success of the marketing and recruitment plans.

5. Recruitment Plans. Describe recruitment plans, including advertising, outreach activities and other means of informing the public about your program.

NOTE: ERCs are multi-component interdisciplinary programs. Therefore, Tables 2-10 may be repeated throughout the application for each academic and continuing education training area, as appropriate. For each Table number add the name of the program. For example, Table 2-Industrial Hygiene, Table 9-HST.

D. Minority Recruitment and Retention Plan

The NIOSH promotes broad and systematic efforts to recruit individuals from groups currently underrepresented in occupational safety and health.

Applications without a description of diversity recruitment efforts will be considered incomplete and will be returned to the applicant without peer review.

Describe the program's previous efforts and plans to recruit and train graduate students and/or postdoctoral trainees from groups underrepresented in occupational safety and health. Organize the information as follows:

History. Describe efforts to recruit minority students into the existing training program. In competing continuation applications, also describe past efforts to recruit and retain underrepresented students.

Achievements. In a table (Table 13), summarize recruitment data for the ERC by training area in each of the past 3 years. Provide the number of minority individuals who applied; number offered admission; and number who entered the program. For those who entered the program, indicate current status (i.e., in training, graduated or completed training) and all sources of support. For those who have left the program or completed training, include information about their subsequent career development or employment.

Proposed plans. Describe steps to be taken during the proposed award period regarding the identification, recruitment, and retention of graduate students and postdoctorates from underrepresented groups.

E. Plan for Instruction in the Responsible Conduct of Research

Applications lacking a plan for instruction in the responsible conduct of research will be considered incomplete and will be returned to the applicant without review.

Every research masters, doctoral and postdoctoral trainee must receive instruction in the responsible conduct of research. Describe a plan to provide trainees with formal and

informal instruction on scientific integrity and ethical principles in research. The plan must address the rationale for the instruction, the format and subject matter, the degree of faculty participation, trainee attendance, plans to assess the quality and the frequency of instruction. For competing continuation applications, describe the type of instruction provided in the current project period, the degree of student participation, the results of any assessments and other relevant information.

There are no specific curriculum or format requirements for this instruction; however, conflict of interest, responsible authorship, policies for handling misconduct, policies regarding the use of human and animal subjects, data management, and data-sharing are areas that are strongly suggested for consideration. Applicants may wish to consult the NIH web site (http://www.nih.gov/sigs/ bioethics/researchethics.html) for additional guidance.

F. Progress Report (Competing Continuation Applications Only). This section does not count towards the page limitations specified in other sections.

State the period covered. Briefly describe the accomplishments of the training program. This will be done for each training program separately.

In a table (Table 9), for each year of the grant since the last competing application, provide the following: 1) total number of positions awarded in each training category; 2) number of predoctoral trainees appointed and months of support committed; and 3) number of postdoctoral trainees appointed, with what degrees, at what levels, and for how many months. If any trainee positions were not filled, explain the reason. In a table (Table 10), list all trainees who were, or are, supported by this training grant (past 5 years only, if applicable). For each student provide: 1) name; 2) year of entry into the training program; 3) prior institution and degree at entry; 4) source of support during each year of training, e.g., this training grant, another training grant (specify), research grant, university fellowship, individual fellowship (specify), etc.; 5) name of research mentor, if applicable; 6) research topic, if applicable; and 7) for trainees who have completed the program, their current positions and institutional affiliations. In the narrative section of the Progress Report, list each research trainee supported during the period covered and indicate in parentheses the preceptor/mentor. Briefly summarize the research conducted by each trainee and list all publications (full citation) that resulted from the work done during research training. If any postdoctoral trainee with a health professional degree who was appointed to the grant during the most recent award period received less than 2 years of research training, explain why. Where possible for past trainees, describe the extent of their current involvement in research, including research grant support and representative recent publications. This information will be used to track the pattern of support of trainees and the subsequent research career development of former trainees.

Describe any specific effects of this training program on curriculum and/or research directions. Describe how the funds provided under Training Related Expenses were used to benefit the program.

G. Human Subjects

As indicated earlier in these instructions (Item 4 on the Face Page), where appropriate, include a list of already reviewed research project grants (grant number, principal investigator, project title) and their IRB approval dates or exemption designations.

H. Vertebrate Animals

As indicated earlier in these instructions (Item 5 on the Face Page), where appropriate, include a list of already reviewed research project grants (grant number, principal investigator, project title) and their IACUC approval dates.

H. Consortium/Contractual Arrangements

Describe any programmatic, fiscal, or administrative arrangements between the applicant organization and other participating organizations. See Section 1.C.7.h for additional guidance.

I. Resource Sharing

Not applicable to Institutional Training Grants. Omit this section.

9. APPENDIX

Appendix material is generally not needed with training grant applications, although there may be exceptions. Syllabi (as specified in the announcement) for academic disciplinary areas should be included in the Appendix. Oversized documents, brochures, and catalogues should not be submitted. Five collated sets of any appendix material should be submitted.

10. CHECKLIST

CHECKLIST PHS 398 FORM PAGE (MS WORD OR PDF)

Inventions and Patents

Not applicable.

Facilities and Administrative Costs

Facilities and Administrative (F&A) costs, other than those issued to state or local government agencies, will be awarded at 8 percent of total allowable direct costs (exclusive of equipment, tuition and related fees). State and local government agencies will receive the full F&A cost rate.

11. KEY PERSONNEL REPORT

Not applicable.

12. LIST OF TABLES

Table 1: ERC Training Support.

Table 2: Faculty Members Research Grant and Contract Support

Table 3: Faculty Member Current and Past Students

Table 4: Statistical data on trainees

Table 5: Listing of graduates

Table 6: Trainee Summary Data

Table 7: Trainee Qualifications

Table 8: Post Doctoral Qualifications

Table 9: Positions Awarded Last Project Period

Table 10: Trainees Supported Last Project Period

Table 11: Continuing Education Faculty

Table 12: CE course offerings by program area

Table 13: Minority Recruitment Data

Table 14: Human Subjects Grants

Table 15: Animal Subjects Grants

Do **not** place all tables together at the end of the application. Tables should be inserted into the application in the appropriate sections.

13. SUGGESTED FORMAT FOR TABLES

A suggested format for these tables is provided on the NIOSH web site under "Suggested formats for Training Tables"